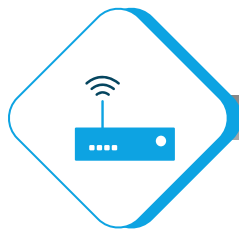




# Very Small Aperture Terminal (VSAT)

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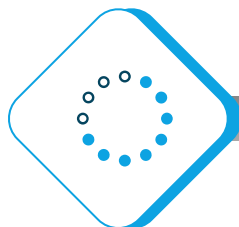
## What is Very Small Aperture Terminal (VSAT)?



VSAT is a **satellite-based communication** system that uses small dish antennas to provide connectivity



Operates over **GEO satellites** using high-capacity C, Ku-or Ka-band signals, delivering internet, voice, & data



**Self-contained, satellite-linked systems** with no dependency on terrestrial backbone, tower infrastructure, or last-mile fiber



Offers **reliable, quick connectivity** with download speeds up to 100 Mbps+ & upload of 10 Mbps 10+



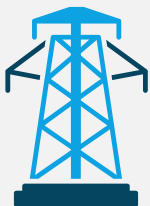
Suitable for **greenfield, mobile** or **temporary** applications, in **remote locations** with unreliable connectivity



## VSAT for Business

# Why does your business need Very Small Aperture Terminal (VSAT)? (1/2)

1



### Guaranteed Uptime & Remote Reach

- Always on, high availability connectivity in remote, rugged, or disaster-prone regions
- Enables **critical communication links** where terrestrial & mobile network is unreliable

2



### Rapid Deployment & Scalable Architecture

- Quick installation independent of fiber/cellular footprint; ideal for urgent connectivity setups
- Supports **modular scaling** from single-site to nationwide footprints via satellite beams

## Why does your business need Very Small Aperture Terminal (VSAT)? (2/2)

### VSAT for Business

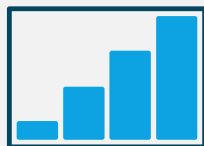
3



#### Secure & Customizable Enterprise Networks

- Enables private, encrypted connectivity via MPLS, VPN, GRE tunneling or IPsec based protocols
- Custom bandwidth & dedicated capacity to ensure traffic isolation & business grade QoS

4



#### Bandwidth Flexibility & Application Support

- Dedicated or pooled bandwidth tailored to enterprise needs - from 4 kbps to multi-Mbps
- Works across IPv4, IPv6 protocol and integrates into existing WAN infrastructure

# The BSNL Advantage: Scale, Trust and Service

Over  
**₹5,000 Cr**  
in enterprise  
revenue

Over  
**61,000**  
Enterprise  
branches under  
the Platinum  
category alone

- 1 Known for Trust and transparent (1:1) billing
- 2 Reliable connectivity partner offering resilient network



## Clients



## Why BSNL VSAT?



BSNL is a **100% Government of India-owned** telecom company with a decades-long track record



BSNL is the **first VSAT service provider** in India to use High Throughput Satellite, providing pan-India connectivity



Pan-India **Ka- & Ku- band coverage** using 16 spot beams, offering high-speed satellite connectivity with smaller, cost-efficient terminals



**Redundancy ensured** on BSNL Optical gigabit super-highways



## Salient features of VSAT



Compatible with all IP (v.4 & v.6) protocols



Shared & **customised bandwidth** per customers requirements



**Quick network deployment** including inaccessible/remote areas



In built GRE Tunneling allowing **secure** and **efficient integration** with core network



Transparent to IPsec Protocols

# BSNL VSAT Terminal features



Maximum Trans/Receive Data up to 100 Mbps with 10/100 Mbps Base-T Ethernet interface



VoIP telephony with SIP Phones



Power consumption: 30W (AC input power)

## Compact Indoor Unit (IDU)



Occupies very little space; Connected to VSAT antenna through RG-6 cable of maximum 30m length

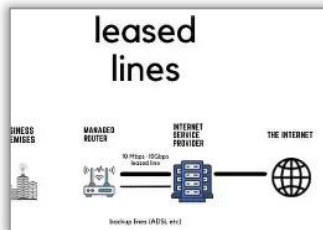
## Outdoor Unit (ODU)



Antenna (1.2m, 1.8m, and 2.4m), Low Noise Block (LNB), Block Up Converter (BUC), and feeder assembly



## BSNL offers the following services in VSAT



Leased lines through VSAT on IP platforms: 4kpbs onwards



High speed broadband internet



Voice telephony, video conferencing & video streaming



DVB-S2X Enabled



VPN Networking



Facsimile



Create VPNs with VSAT Network, MLLN nodes, MPLS nodes of BSNL



Interworks with existing BSNL Internet, MPLS & MLLN



Marginal additional investment with existing BSNL MPLS, MLLN